



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER 087621-631	FILING DATE 03/28/96	FIRST NAMED APPLICANT BROWN	ATTY. POCKET NO. 621-631
----------------------------------	-------------------------	--------------------------------	-----------------------------

THOMAS E KELLEY
CABOT CORPORATION
157 CONCORD ROAD
BILLERICA MA 01821

22M2/0528

EXAMINER

MILLER, E

ART UNIT	PAPER NUMBER
----------	--------------

2204

6

DATE MAILED: 05/28/97

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-9 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-9 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☒ Claim(s) 1-9 are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4+5
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☒ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

1. The following is a quotation of 35 U.S.C. 103 which forms the basis for all rejections for obviousness set forth in this action:

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102, which form a basis for rejections herein:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, as best understood, is rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over each of Bielecki et al. and Floeter et al.

It appears that these claims are anticipated, as best understood. However, should the claims mean something other than what appears, or minor variations be present, variation of notoriously well known parameters would have been obvious. It is well settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

3. Claims 1-9 are rejected under 35 U.S.C. 112, first and second paragraphs, because the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims are unduly broad and indefinite. Throughout, there exist various limitations which are improper, implied limitations, and which are not adequately supported by the

specification. Further, various instances of lack of proper antecedent or inconsistent terminology render the claims indefinite. For example, claim 1 is unlimited as to the desired metal values, but the disclosure is to particular types of processes, involving a limited number of metal species. Thus, the specification is not enabling as to the great breadth that is claimed in claim 1. Continuing, in claim 2, there is no antecedent basis for the metals set forth in line 5 thereof. Likewise, there is no antecedent for "the undissolved material" in line 6 thereof, especially since the claim contemplates dissolution of all the material. Alternately, there are necessary but only implied limitations not stated, which are omitted from the claims as written. These types of problems exist in all the claims. For example, in independent claim 8, there is no antecedent for tantalum and niobium in line 6 in the metals previously recited in lines 1-2 thereof, so this is indefinite. Further in claim 8, various steps recite step-wise extraction of different metals. However, there is no limitation on the specific extractants in the specific successive steps. Therefore, there can be no assurance that any following extraction will be able to extract the metal set forth, as it may have been extracted previously. Thus, these step limitations are all improper and contain implied limitations on kind of extractants, conditions, etc., not set forth in the claim, whereby the steps are possible. These are exemplary.

It is improper, indeed reversible error, to rely on speculation as to the meaning of indefinite claims and then reject that speculative meaning on prior art. *In re Steele*, 305 F.2d 858, 134 USPQ 292 (CCPA 1962), *Ex parte Brummer*, 12 USPQ2d 1653 at 1655 (USPTO BOPAI 1989). Therefore, although the art rejection in paragraph 2 above has been provided as illustrative, the claims generally have not been examined as to prior art since they are so indefinite throughout.

4. Applicant is required under 35 U.S.C. 121 to elect a single, ultimate, disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, all claims appear generic. This requirement is on the basis of an unduly burdensome search, MPEP 809.02(d) and/or Markush practice, MPEP 803.02. The single ultimate species shall be one specific method as in a single example. This single ultimate method species shall specify the metals desired to be recovered, and the order of recovery thereof.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An

argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. 1.141. If claims are added subsequently, applicant must indicate those readable on the elected species. MPEP 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if one of the inventions is found unpatentable over the prior art, the evidence or admission will also be applicable under 35 U.S.C. 103 as to the other invention.

Further, the species could be regarded as different combinations and subcombinations. However, MPEP 806.04(c), a subcombination is not generic to a combination. Further, while claim 8 might be regarded as an embodiment of one overall combination, while claims 1 and 9, e.g., may be regarded as expressions of different subcombinations. Such subcombinations, and others, do not appear to be mutually necessary to each other for patentability, see MPEP 806.05(c). Where different subcombinations are found in a combination invention, by definition, each subcombination cannot be necessary to the combination, as shown by the evidence of the other independent subcombination.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


6. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163.

Examiner Miller may normally be reached daily, except alternate Fridays, from 8:30 AM to 6 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor, Mr. Jordan, can be reached at (703) 306-4159. The Group fax number is (703) 306-4195.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 306-4177.

Miller/em
May 27, 1997


EDWARD A. MILLER
PRIMARY EXAMINER
ART UNIT 224